

REMARKS

This Amendment is filed in response to the Final Office Action mailed Feb. 3, 2009 in connection with a Request for Continued Examination and a Petition for a 1-Month Extension of Time. The Applicant respectfully requests reconsideration of the rejections presented therein. All rejections are respectfully traversed.

Claims 35 – 40, 46 and 49 – 62 are pending in this application.

Claims 36 – 37, 40, 54, and 61 have been amended.

Response to Examiner's Response to Arguments

At paragraph 4 of the Final Office Action, the Examiner suggests that “applicant argues in substance that B) Beser does not teach [an] interface that has connectivity to a server sending a discover message to request assignment of an IP address for use with another interface that does not have connectivity to the server. In response to B) Applicant’s argument is inconsistent with the claim limitation. This/These limitation(s) are not found in the claims.”

The Applicant respectfully requests reconsideration. The subject matter the Examiner suggests is not found in the claims is a close paraphrase of the Applicant’s claim language. Specifically, Applicant’s representative claim 35 recites “... broadcast a discover message from an interface of the layer three device that provides connectivity via the network to the server, the discover message indicating that the layer three device is requesting assignment of one or more Internet Protocol (IP) addresses for an interface lacking connectivity to the server ...” (emphasis added). While the wording is slightly different, the underlying meaning is quite similar.

As such the Applicant respectfully urges that such arguments are directly related to what the Applicant claims, and as explained below, highlights a distinction between what is claimed and the differing type of operation that Beser describes.

Drawings

At paragraph 2 of the Final Office Action, the drawings were objected to under 37 CRF 1.83(a). Specifically, the Examiner suggests that the drawings do not show every feature specified in the claims. *See* Office Action, paragraph 2. The Applicant submits herewith an amended version of Fig. 3C. In light of such amended drawings, and the comments below, the Applicant respectfully requests the objection to the drawing be withdrawn.

In relation to the following features, the Applicant respectfully directs the Examiner attention to the corresponding elements of the drawings and other provided comments:

- “formulate discover message” – step 334 of Fig. 3C.
- discover message requesting “one or more proffered IP addresses for assignment to the interface lacking connectivity to the server.” – step 334 of Fig. 3C.
- “configured and arranged to receive and examine an acknowledgment from the server that confirms its receipt of the request message.” – step 344 of Fig. 3C.
- “the discover message contains an option that is marked by the layer three device to indicate that it is requesting assignment of one or more IP addresses for an interface lacking connectivity to the server.” – step 334 of Fig. 3C and DHCP router extension option 400 of Fig. 4A includes type field 406 that is marked to indicate the request is for an IP subnet and corresponding IP address for an interface that does not represent a path to the DHCP server.
- “offer includes a variable length IP address bearer option.” – step 336 of Fig. 3C and IP address bearer option 420 of Fig. 4B.
- “offer message includes a routing parameter option.” – step 336 of Fig. 3C and routing parameter option 430 of Fig. 4C.
- “the intermediate device is a router.” – 214 of Fig. 2 is a “layer 3 device.” *See* Specification, page 14, line 1. “The terms “layer 3 device” or “layer 3 switch” as

used herein are intended broadly to cover any intermediate device operating at the network layer, including, without limitation, routers as defined by Request for Comment (RFC) 1812” See Specification page 14, line 19 to page 15 line 3. Thus 214 of Fig. 2, in one possible embodiment, is a router.

- “offer sent by the at least one server includes a subnet mask for use with the interface lacking connectivity to the server.” – step 336 of Fig. 3C and IP/Subnet_pair fields 426 of IP address bearer option 420 of Fig. 4B.
- “lease time indicating a life of the respective proffered address” – options field 130 of Fig. 3C may contain proposed lease time.
- “verifying that an offer is not received in response to the discover message from the interface lacking connectivity to the server.” – step 332 of Fig. 3C.

Accordingly, the Applicant respectfully urges that the drawings are not objectionable and respectfully requests the objection be withdrawn.

Claim Rejections – 35 USC §102

At paragraph 3 of the Final Office Action, claims 35 – 40, 46 and 49 – 62 were rejected under 35 U.S.C. §102(e) over Beser, U.S. Patent No. 6,049,826 (hereinafter “Beser”).

The Applicant’s claim 35, representative in part of the other rejected claims, sets forth (emphasis added):

35. A layer three device for connection to a computer network having a server that assigns Internet Protocol (IP) addresses, the layer three device having a plurality of interfaces each representing a logical connection to the computer network, the layer three device comprising:

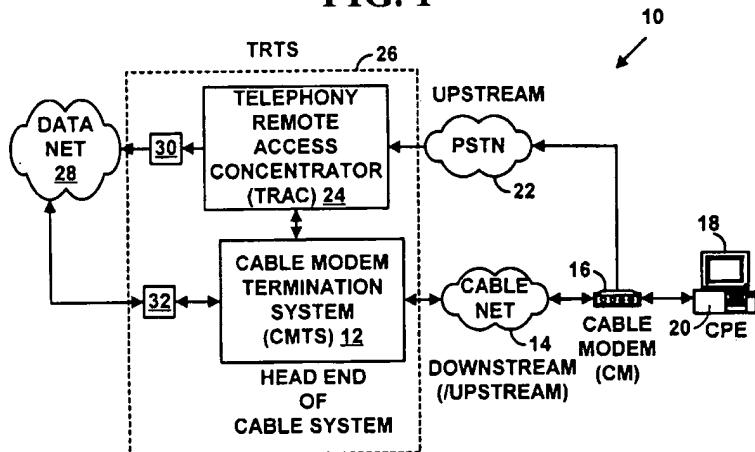
a message transmitter connected to the computer network; and
a message receiver connected to the computer network,

wherein the message transmitter is configured and arranged to formulate and *broadcast a discover message from an interface of the layer three device that provides connectivity via the network to the server, the discover message indicating that the layer three device is requesting assignment of one or more IP addresses for an interface lacking connectivity to the server*, and the message receiver is configured

and arranged to receive and examine an offer sent by the server, that includes at least one or more proffered IP addresses for assignment to the interface lacking connectivity to the server.

Beser discusses a technique for initializing a cable modem (CM) 16. In reference to Fig. 1 (reproduced below), the CM has an upstream connection, via PSTN 22, and a downstream connection, via cable network 14. The “CM generates a DHCP Discover message and sends it upstream via PSTN [22] to [Telephony Remote Access Concentrator] TRAC [24]” and it is eventually forwarded to DHCP servers. *See Fig. 7A, 142, 144, 146.* The DHCP servers generate DHCP Offer messages to send back to the CM 16. Cable Modem Termination System (CMTS) 12 receives one or more DHCP Offer messages from DHCP servers. *See Fig. 7B, 150.* Then “CMTS sends CM one or more DHCP Offer messages via a downstream channel on the cable network [14].” *See Fig. 7B, 152.* The CM eventually uses one of the IP address in the DHCP Offer message with the interface it was received on.

FIG. 1



The Applicant respectfully urges that Beser is silent concerning the Applicant's claimed novel "...broadcast a discover message from an interface of the layer three device that provides connectivity via the network to the server, the discover message indicating that the layer three device is requesting assignment of one or more IP addresses for an interface lacking connectivity to the server ..."

While the Applicant broadcasts a discover message **from an interface that provides connectivity a server, to request assignment of one or more IP addresses for an interface lacking connectivity to the server,** Beser simply discusses sending a discover message upstream to request an address for an interface that has connectivity to DHCP servers. Both Beser's upstream and downstream connections offer some type of connectivity to the DHCP servers (i.e: upstream connectivity and/or downstream connectivity). Thus, a request for an IP address for an interface to either connection may not fairly be interpreted as "requesting assignment of one or more Internet Protocol (IP) addresses for an interface lacking connectivity to the server."

This distinction between what the Applicant claims and what Beser describes may be illustrated by example. For instance, consider the example network shown in Applicant's Fig. 2 (reproduced below) In this example, layer three device 214 has an interface (e.g., the interface to subnetwork 202) that provides connectivity via the network to a server 220 that assigns IP addresses. Layer three device 214 also has an interface lacking connectivity to the server 220 that assigns IP addresses (e.g., the interface to subnetwork 204, which does not lead to the server 220). Should the interface to subnetwork 204 require an IP address, the layer three device 214 may novelly "*broadcast a discover message from an interface of the layer three device that provides connectivity via the network to the server, the discover message indicating that the layer three device is requesting assignment of one or more IP addresses for an interface lacking connectivity to the server*"

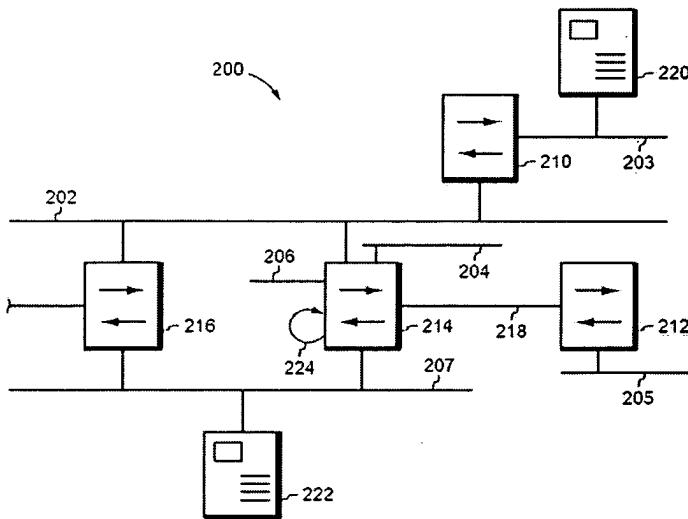


FIG. 2

In contrast, Beser's Fig. 1 (reproduced above) makes clear that that interfaces for which Beser is potentially requesting assignment of an IP address have connectivity to Beser's DHCP servers, as they both offer some connection (upstream or downstream) to data network 28.

Accordingly the Applicant respectfully urges that Beser may not fairly be interpreted as teaching "*...broadcast a discover message from an interface of the layer three device that provides connectivity via the network to the server, the discover message indicating that the layer three device is requesting assignment of one or more IP addresses for an interface lacking connectivity to the server ...*" and thus does not anticipate the claims 35 U.S.C. §102(e).

In the event that the Examiner deems personal contact desirable in disposition of this case, the Examiner is encouraged to call the undersigned attorney at (617) 951-2500.

In summary, all the independent claims are believed to be in condition for allowance and therefore all dependent claims that depend there from are believed to be in condition for allowance. The Applicant respectfully solicits favorable action.

PATENTS
112025-0096C1
Seq. 8848; CPOL 412107

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Respectfully submitted,

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